CLAIMS

What is claimed is:

1. A method for performing motion estimation comprising:

receiving a stream of data comprising one or more bidirectionally interpolated frames (B-frame) and a plurality of anchor frames; and

unidirectionally predicting content of each B-frame from a temporally closest anchor frame.

2. The method of claim 1, wherein the content of the B-frames is unidirectionally predicted from the content of the temporally closest anchor frame and one or more motion vectors.

3. The method of claim 2, wherein the one or more motion vectors represent an activity measure of the temporally closest anchor frame.

4. The method of claim 3, wherein the motion vector is determined by a sum of absolute differences in activity within the temporally closest anchor frame.

5. The method of claim 1, wherein the temporally closest anchor frame selected to unidirectionally predict the content of the B-frame may either precede or supersede the B-frame.

6. The method of claim 1, wherein the plurality of anchor frames and B-frames contain progressive video content.

7. The method of claim 1, wherein the plurality of anchor frames and B-frames contain interlaced video content.

8. An apparatus comprising:

a motion estimation circuit to receive one or more bidirectionally interpolated frames (B-frame) and a plurality of anchor frames, and to unidirectionally predict content of each of the plurality of B-frames from a select anchor frame.

9. The apparatus of claim 8, wherein the motion estimation circuit predicts the content for each B-frame from a temporally closest anchor frame.

10. The apparatus of claim 8, wherein the motion estimation circuit generates a motion vector based, at least in part, on the selected anchor frame.

11. The apparatus of claim 10, wherein the motion vector represents an activity measure of the anchor frame.

12. The apparatus of claim 10, wherein the motion estimation circuit generates the motion vector from a sum of absolute differences in activity within the anchor frame.

13. The apparatus of claim 10, wherein the motion estimation circuit unidirectionally predicts the content of B-frames from a temporally closest anchor frame and one or more motion vectors generated therefrom.

14. The apparatus of claim 13, wherein the motion estimation circuit generates the one or more motion vectors from a sum of absolute differences in activity within the temporally closest anchor frame.

15. The apparatus of claim 8, wherein the motion estimation circuit utilizes either a preceding or superseding anchor frame to predict B-frame content, depending on which is temporally closer to the B-frame.

16. A storage medium comprising a plurality of executable instructions which, when executed, cause an executing processor to implement a motion estimation function to unidirectioanlly predict content of each of a plurality of received bidirectionally interpolated frames (B-frames) from a select anchor frame.

17. The storage medium of claim 16, wherein the motion estimation function utilizes either a preceding or superseding anchor frame to predict B-frame content, depending on which is temporally closer to the B-frame.

18. The storage medium of claim 16, wherein the motion estimation function generates a motion vector from a sum of absolute differences in activity within the select anchor frame to encode the B-frame.

19. The storage medium of claim 16, wherein the motion estimation function selects the temporally closest anchor frame to the B-frame as the select anchor frame.